NRC NEWS

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Comments of Commissioner Jeffrey S. Merrifield
Saxton Nuclear Power Plant
November 8, 2005

- Good Morning. On behalf of the United States Nuclear Regulatory Commission (NRC), it is indeed, a pleasure to be here today to participate in the celebration of the completion of the decommissioning of Saxton Nuclear Power Plant.

- Nearly 44 years ago, on November 15, 1961, to be precise, our predecessor, the Atomic Energy Commission (AEC), issued a license to the Saxton Nuclear Experimental Corporation to operate an experimental pressurized water reactor.

- The reactor, which first went critical on April 12, 1962, was not built primarily to generate electricity. Instead, it was intended as a research and developmental program to demonstrate how a nuclear reactor could be operated under utility operating conditions.

- AEC documents dating to the early 60's describe the Saxton effort as "'generating knowledge' about getting more heat, and hence more electricity, out of nuclear fuel and thereby reducing the future costs of power generation."

- While Saxton only generated power at 23.5 thermal megawatts, a mere fraction of a modern nuclear power plant, it laid the foundation for understanding how "better and more powerful reactors" could be built in the future.

- Saxton served as a pioneer in the nuclear industry through its use of boron in cooling water to control the chain reaction and it was the first privately owned reactor to use plutonium as fuel.

- Operating more than 11 years until it shut down in May of 1972, Saxton was distinguished by the fact that it operated with neither fanfare nor serious incident. Decommissioned at a time when our current 104 reactor fleet was in its boom years, Saxton quickly faded in the memory of the AEC.

- As I was preparing to come here today, I was struck by two facts. The first is, that as far as we can tell, I am one of the first, if not the first Commissioner of either the AEC or the NRC to have visited this site.

- Part of that reason results from tradition. As a matter of practice, Commissioners typically did not attend reactor groundbreaking or commissioning ceremonies, because of a concern that this would be perceived as an endorsement of promotion of nuclear power.

- Beginning in the mid-1980's it became more of a habit for NRC Commissioners to visit operating nuclear plants to oversee their safe operations, but obviously, by that time, Saxton was long shut down.

- The second fact that struck me is that counter to my intuition, at the time Saxton was first conceived and built, virtually no consideration was given as to what to do with the reactor site when power operations were completed.

- In our society today, it would be inconceivable to think that a nuclear power plant could be licensed and built with virtually no consideration about what to do with the radioactively contaminated building after its useful life was complete. Yet that is precisely what happened in 1961.

- As a side note, Saxton did not even have to face one of the most difficult issues confronting many other reactors that have gone through decommissioning. The fuel used at Saxton was owned by the federal government and consequently was returned to the Savannah River site in South Carolina when the reactor ceased operations in 1972. Other reactors have not been so lucky in resolving the issue of where spent fuel will be sent to complete the decommissioning process.

- At the time of Saxton's shut down in 1972, the AEC was only in the very early stages of deciding what to do with these decommissioned reactors.

- In 1977, in testimony before the House Committee on Science and Technology, the NRC stated that virtually all of the 11 test reactors that had closed by that time had chosen mothballing as the alternative for decommissioning. Referencing Saxton in particular, the NRC expected that the "the residual radioactivity may be removed after about 50 years" – or about the year 2027.

- It was not until 1988, after more than 11 years of effort, that the NRC issued a final rule that required utilities to specify how they would assure that adequate funding was available to clean up a site after a plant ceased operation. In addition, this rule required them to outline how they would conduct the decommissioning, how long it would take, and how they would protect public health and safety in the process.

- For the first time, the Commission, following the lead of communities like this one, began to ask for a more robust explanation of how decommissioning would result in the unrestricted use of the site and a greater justification for choosing options such as entombment or mothballing for decommissioning sites instead of returning the site to its original condition.

- Today, if you look upon the field where a power reactor used to sit, it is hard to believe that our predecessors could have been so short sighted. While the promises of nuclear power certainly gleamed in the eyes of many Americans, it is unfortunate that it took so long for the final pages in the history of Saxton to be turned.

- Yet today is a day of celebration. Through the dedication of many local residents who participated as members of the Saxton Citizens Task Force, attended one of the many meetings held regarding decommissioning, or cheered on those who did, this effort resulted from significant community involvement and planning.

- Likewise, General Public Utilities (GPU), which built and operated the reactor, and which is now represented by First Energy, took the responsibility for the decommissioning of this site, at a cost many times in excess of the cost to build it in the first place.

- This is also an important event for my Agency, the NRC, for it represents the fulfillment of our obligation to license nuclear facilities in a manner that protects public heath, safety and the environment. Today, unlike our predecessor the AEC, environmental stewardship is a much more important element of our mission.

- Like its pioneering days of the early 1960's, Saxton is also one of the pioneers in a new effort: providing for a decommissioning that allows for productive reuse of the site by the local community. This site can be used safely for any number of activities, which is a goal we would like to achieve for every decommissioned site.

- In our nation today, we are on the precipice of a number of utilities considering the decision of whether or not to build new nuclear reactors in the United States. After a long dormancy, as many as 6-8 utilities may seek combined operating license applications with the NRC in the next few years.

- As Saxton helped to create the conditions for the operation of large nuclear reactors, the efforts of this community, this utility, and our Agency, which resulted in the decommissioning of Saxton, have also set a new stage for nuclear power. While many questions may be asked about the cost or need to build a nuclear reactor, Saxton has answered the question as to whether reactors can be fully dismantled after they fulfill their useful life. Communities all across America will benefit from the hard-fought lessons learned here in Saxton.

- Again, I want to thank you for allowing me to join you today.